K121544

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### 510(K) SUMMARY OF SAFETY AND EFFECTIVENESS

In accordance with the Food and Drug Administration Rule to implement provisions of the Safe Medical Devices Act of 1990 and in conformance with 21 CFR 807, this information serves as a Summary of Safety and Effectiveness for the use of the DYNASTY® BIOFOAM® Shell.

Submitted By: Wright Medical Technology, Inc.

5677 Airline Rd, Arlington TN, 38002

(800) 238-7188

**Date:** May 10, 2012

Contact Person: Yuan Li

Regulatory Affairs Specialist

Proprietary Name: DYNASTY® BIOFOAM® Shell

Common Name: Acetabular Cup

Classification Name and Reference: 888.3330 Hip joint metal/metal semi-constrained,

with an uncemented acetabular component

prosthesis Class III

Subject Product Code and Panel Code: Orthopedics/87/KWA

Predicate Devices: DYNASTY® Acetabular System

510(k)s: K082924

### **DEVICE INFORMATION**

### A. Intended Use

The DYNASTY® BIOFOAM® Shells are intended for use in cementless total hip arthroplasty for reduction or relief of pain and/or improved hip function in skeletally mature patients.

### Indications for Use

- 1. non-inflammatory degenerative joint disease such as osteoarthritis, avascular necrosis, ankylosis, protrusio acetabuli, and painful hip dysplasia;
- 2. inflammatory degenerative joint disease such as rheumatoid arthritis;
- 3. correction of functional deformity; and,
- 4. revision procedures where other treatments or devices have failed

The DYNASTY® BIOFOAM® Shell is intended for cementless hip arthroplasty.

### **B.** Device Description

Design features of the shells are summarized below:

- Shells manufactured from Titanium alloy substrate, coated with BIOFOAM® coating manufactured from commercially pure (CP) titanium
- Solid shell sizes: 46mm-68mm outer diameter

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- Three different hole patterns:
- 10-hole shell sizes: 46mm-76mm outer diameter
- 3-hole shell sizes: 46mm-68mm outer diameter
- 5-hole shell sizes: 46mm-50mm outer diameter

The DYNASTY® BIOFOAM® Shells are identical to previously cleared devices, except that the subject device posses different screw hole patterns. Additionally, the DYNASTY® BIOFOAM® Shells were evaluated via post-impaction analysis of clearance, form and frictional torque. A review of these results indicates that the DYNASTY® BIOFOAM® Shells are equivalent to predicate devices.

## C. Substantial Equivalence Information

The indications for use of the DYNASTY® BIOFOAM® Shells are identical to the previously cleared predicate device. The design features and materials of the subject devices are substantially equivalent to those of the predicate devices. The fundamental scientific technology of the modified devices has not changed relative to the predicate devices. The safety and effectiveness of the DYNASTY® BIOFOAM® Shells are adequately supported by the substantial equivalence information, materials information, and analysis data provided within this Premarket Notification.



Public Health Service



Food and Drug Administration 10903 New Hampshire Avenue Document Control Room –WO66-G609 Silver Spring, MD 20993-0002

Wright Medical Technology, Incorporated % Yuan Li, Ph.D Regulatory Affairs Specialist 5677 Airline Road Arlington, Tennessee 38002

JUL 3 0 2012

Re: K121544

Trade Name: DYNASTY® BIOFOAM® Shell

Regulation Number: 21 CFR 888.3330

Regulation Name: Hip joint metal/metal semi-constrained, with an uncemented acetabular

component prosthesis

Regulatory Class: III Product Code: KWA Dated: March 31, 2011 Received: April 1, 2011

### Dear Dr. Li:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you, however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical

device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please go to <a href="http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm">http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm</a> for the Center for Devices and Radiological Health's (CDRH's) Office of Compliance. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to

http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address <a href="http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm">http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm</a>.

Sincerely yours,

Mark N. Melkerson

Director

Division of Surgical, Orthopedic and Restorative Devices Office of Device Evaluation Center for Devices and Radiological Health

Enclosure

K121544

# **Indications for Use**

| 510(k) Number (if known): |   |
|---------------------------|---|
|                           | • |

Device Name: <u>DYNASTY® BIOFOAM® Shell</u>

### Indications For Use:

- 1. non-inflammatory degenerative joint disease such as osteoarthritis, avascular necrosis, ankylosis, protrusio acetabuli, and painful hip dysplasia;
- 2. inflammatory degenerative joint disease such as rheumatoid arthritis;
- 3. correction of functional deformity; and,
- 4. revision procedures where other treatments or devices have failed.

The DYNASTY® BIOFOAM® Shell is intended for cementless hip arthroplasty.

Prescription Use X AND/OR Over-The-Counter Use (Part 21 CFR 801 Subpart D) (21 CFR 807 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)

(Division Sign-Off)

Division of Surgical, Orthopedic,

and Restorative Devices

510(k) Number <u>K121544</u>